



## Safety & Mission Assurance

Presenter **M. D. Erminger**

Date **May 16, 2002**

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# STS-111/UF2

## Flight Readiness Review



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# Approach and General Description

**S&MA held reviews in preparation for the STS-111/UF2 Flight Readiness Review on 3 May, and 14 May, 2002 and is ready to proceed toward launch countdown.**

## FRR Briefing Overview

- **Significant assessments - *discuss***
- **Special topics**
  - **NASA Safety Reporting System (NSRS) - *discuss***
  - **Space Shuttle Hazard Analysis - *discuss***
  - **Space Shuttle FMEA/CIL – *discuss***
- Space Shuttle and Space Station Independent Assessments - *none*
- **Significant Open work - *discuss***
  - CoFR Exceptions - *none*
  - Open Action Items - *none*



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# Significant Assessments

## Space Station

- Oxygen Elektron Repair Plan and Oxygen Generation

## Orbiter

- STS-110 RCS Jet Problems
- Power Static Inverter (PSI) Capacitor Issue

## Launch & Landing

- STS-110 Front End Processor Failure at T-5 Minutes

## SRB

- Power Bus Isolation Supply (PBIS) Capacitor Failure

***ADDITIONAL ASSESSED ITEMS ARE IN THE BACKUP CHARTS***



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# Significant Assessments

## RSRM

- STS-107 Right Hand Field Joint Pin Extrusion

## SSME

- Engine 2056 Nozzle Contamination – *significant open work*

**ADDITIONAL ASSESSED ITEMS ARE IN THE BACKUP CHARTS**



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## NSRS Summary

**There are no NASA Safety Reporting System reports open that are applicable to STS-111/UF2.**

## Hazard Analysis Summary

**There are no new Accepted Risk hazards identified for STS-111/UF2.**

## FMEA/CIL Summary

**There are no new Criticality 1 failure modes identified for STS-111/UF2.**



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# STS-111/UF2 Readiness Statement

With the satisfactory completion of identified open work, Safety and Mission Assurance has no constraints to STS-111/UF2. S&MA has no issues that constrain any of the mission success criteria.

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# **STS-111/UF2**

## **Flight Readiness Review**

### **Backup Package**



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# Additional Assessments

## Orbiter/GFE

- First Flight/Critical Process Change
  - Midbody Crossover Bracket Re-Design
  - N2 Transfer Hose Quick Disconnect Release Ring
  - Sky Genie Installation Fastener Change
- RMS Direct Drive Switch Cycles
- DSC Transistor Failure Investigation
- Connector Saver Status
- ET Door Drive Actuator Torque Limiter Problem
- T-Handle Age Life test failure
- METOX Update

## SRB

- Hydraulic Pump Keenserts
- IEA ATP Power Supply Capacitor Failure
- Nozzle Platform Contact

## Launch & Landing

- STS-110 MLP LH2 Weld Failure Follow-On Work





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# Additional Assessments

## KSC Safety Health & Independent Assessment

- MLP GH2 vent-line weld failure with regards to STS-111
- STS-110 incident regarding the MPS cover left in the aft during STS-110 aft closeouts
- MPLM contamination response
- Launch on Need processing of the SSRMS wrist joint
- Payload Late Access Kit mishap during STS-108